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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/743,947	12/24/2003		Kenji Fukuta	ONO-109	9577	
35777	7590	10/31/2006		EXAM	EXAMINER	
SHERMAN			нин, ве	HUH, BENJAMIN		
	415 NORTH ALFRED STREET ALEXANDRIA, VA 22314		• /	ART UNIT	PAPER NUMBER	
	<b>,</b>			3767		
•				DATE MAILED: 10/31/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

·		N1			
	Application No.	Applicant(s)			
	10/743,947	FUKUTA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Benjamin Huh	3767			
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet w	ith the correspondence address			
A SHORTENED STATUTORY PERIOD FOR R WHICHEVER IS LONGER, FROM THE MAILIN  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication  - If NO period for reply is specified above, the maximum statutory provided to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	IG DATE OF THIS COMMUNI FR 1.136(a). In no event, however, may a  period will apply and will expire SIX (6) MOI estatute, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	<u>18 August 2006</u> .				
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	, <u> </u>				
closed in accordance with the practice un	der Ex parte Quayle, 1935 C.I	D. 11, 453 O.G. 213.			
Disposition of Claims					
4) ⊠ Claim(s) 1 and 4-9 is/are pending in the a 4a) Of the above claim(s) is/are wit 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1, 4-9 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction a	hdrawn from consideration.				
Application Papers					
9) The specification is objected to by the Exa  10) The drawing(s) filed on is/are: a)  Applicant may not request that any objection to Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the	accepted or b) objected to o the drawing(s) be held in abeya orrection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1 Certified copies of the priority docu 2 Certified copies of the priority docu 3 Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in a e priority documents have been fureau (PCT Rule 17.2(a)).	Application No n received in this National Stage			
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-94)</li> </ol>	· —	Summary (PTO-413) (s)/Mail Date			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		Informal Patent Application			

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 & 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumura et al (US Pub. No. 2005/0070840A1) in view of Sibalis (US Patent No. 4713050). The Matsumura et al reference discloses an iontophoresis device that has an working electrode 11 connected to a medical instrument (13,14,15), consisting of a anion-exchange membrane & a cation-exchange membrane connected to a ionic medicine, and a counter electrode 21 connected to the working electrode 11 through a cell 3 and utilizes a electrolyte layer 12 to connect the working electrode 11 to a medical instrument (13,14,15). The Matsumura reference clearly shows the anion membrane and the cation membrane surrounding the ionic medicine. Now even though Matsumura does not explicitly disclose the medicine sealed in a bag attention is directed to Sibalis. The Sibalis reference teaches a device that utilizes medicine, which can be sealed in a bag, see col. 3 lines 22-41. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the device of Matsumura et al with the device of Sibalis in order to create a bag for the medication that is to be delivered that prevents

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leakage of the drug and to help contain the drug. Also wherein the "... by melt-adhering ..." is deemed to be written in product by process language and since the bag is sealed it would inherently be able to have been sealed by that process, also it would be obvious for one of ordinary skill in the art to utilize melt-adhering to seal and form the bag since it is well known to do so not just in the medical art but also generally in sealing bags.

With respect to claim 4, wherein the ionic-medicine substance is a sheet impregnated with a solution of an ionic medicine, see para [00121] Matsumura.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumura et al (US Pub. No. 2005/0070840A1) in view of Sibalis (US Patent No. 4713050) as applied to claim 6 and further in view of Theeuwes et al (US Patent No. 5169382). Now even though the device of Matsumura in view of Sibalis does not explicitly disclose the use of a flexible armoring member for the electrodes attention is directed to Theeuwes. The Theeuwes reference teaches a flexible armoring member 22 in figure 1 on the device. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the device of Matsumura with the device of Theeuwes in order to provide a flexible protecting member for protecting the components of the device from damage.

With respect to claims 8-9, wherein the electrolyte layer connects the working electrode to the medical instrument, see figures 3 & 4 Matsumura, and wherein the layer is in the form of a paste or a gel, see para [0122] Matsumura.

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Claims 1, 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumura et al (US Pub. No. 2005/0070840A1) in view of Kedem et al (US Patent No. 4217200). Matsumura et al reference discloses an iontophoresis device that has an working electrode 11 connected to a medical instrument (13,14,15), consisting of a anion-exchange membrane & a cation-exchange membrane connected to a ionic medicine, and a counter electrode 21 connected to the working electrode 11 through a cell 3 and utilizes a electrolyte layer 12 to connect the working electrode 11 to a medical instrument (13,14,15). Now even though Matsumura does not explicitly disclose the use of utilizing an ion-exchange membrane bag attention is directed to Kedem. The Kedem reference teaches the use of heat-sealed anion-exchange membrane & cationexchange membrane bags see col. 1 line 35 - col. 2 line 26. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the device of Matsumura with the device of Kedem in order to provide a convenient disposable and/or interchangeable medical instrument and for providing a dual sided ion exchange membrane.

## Response to Arguments

Applicant's arguments with respect to claims 1 & 4-9 have been considered but are most in view of the new ground(s) of rejection.

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#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Huh whose telephone number is 571-272-8208. The examiner can normally be reached on M-F: 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on 571-272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BHH

KEVIN C. SIRMONS
SUPERVISORY PATENT EXAMINER

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